

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-28 are active in the present amendment. Claims 1, 20, and 25-27 are amended by the present response. Support for amendments to the claims can be found in the disclosure as originally filed at least in pages 24-37. Thus, no new matter is added.

The outstanding Office Action rejected Claims 1-2, 5, 8-10, 12-28 under 35 U.S.C. §103(a) as unpatentable over Endo (U.S. Pat. No 6,801,340 B1) in view of Grosse et al. (U.S. Pat. No. 5,636,294), herein Grosse; Claims 3-4, 6-7, and 11 were rejected under 35 U.S.C. §103(a) as unpatentable over Endo and Grosse, and in further view of Ohara (U.S. Pat. No. 7,072,060 B2).

With regard to the rejections of Claims 1-2, 5, 8-10, 12-28 under 35 U.S.C. §103(a) as unpatentable over Endo in view of Grosse, Applicants have amended Claims 1, 20, 25, and 27 to over come the rejection. Specifically, amended Claim 25 recites,

A method of converting image data by use of a plurality of conversion units configured to convert the image data, a control unit configured to control the conversion units, and a data communications bus shared among a memory, a processing unit, and the control unit, comprising:

receiving image data from the data communication bus into the control unit;

notifying the control unit of a type of conversion that is to be performed with respect to the image data;

selecting, by the control unit, at least two of the conversion units in response to the notified type of conversion;

supplying, from the control unit to each of the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data;

supplying, from the control unit to each of the selected at least two of the conversion units, a signal indicative of a start of transfer of the image data;

transferring the image data from the control unit to each of the selected at least two of the conversion units; and

outputting the image data to the data communications bus after a predetermined number of conversions are completed by each of the at least two of the conversion units.

Claim 1 has been likewise amended corresponding to an electronic device apparatus. Claim 20 has been likewise amended corresponding to an image forming apparatus. Claim 27 has been likewise amended corresponding to a method claim incorporating a conversion request generating unit.

Endo describes a data communications apparatus and method for document transmission by various transmission methods such as electronic mail, facsimile, remote printing, and file transfer. However, Endo does not recite a plurality of conversion units configured to convert the image data and a control unit configured to control the conversion units which receives image data from the data communication bus into the control unit and outputs the image data to the data communications bus after a predetermined number of conversions are completed by each of the at least two of the conversion units as is recited in Claim 25.

Regarding a plurality of conversion units configured to convert the image data and the control unit, the outstanding Office Action asserts on page 7 that Endo describes the features of the claimed invention. However, Applicants respectfully traverse this assertion.

Specifically, Endo describes a general purpose computer consisting of a central processing unit, read only memory, random access memory, and a hard disk drive. Endo also describes programs such as an operating system, a document-transmission control program, a document-transmission control program, a destination-list generation program, a document input program, a format conversion program, and a document transmission program that are stored in the hard disk. However, Endo does not describe a plurality of conversion units configured to convert the image data and a control unit configured to control the conversion units which receives image data from the data communication bus into the control unit and

outputs the image data to the data communications bus after a predetermined number of conversions are completed by each of the at least two of the conversion units.

In contrast, Claim 25 recites a plurality of conversion units configured to convert the image data, a control unit configured to control the conversion units, and a data communications bus shared among a memory, a processing unit, and the control unit. This control unit receives image data from the data communication bus into the control unit, controls the conversion of the image data by the plurality of conversion units, and outputs the image data back to the data communication bus after a plurality of predetermined number of conversions are complete by each of the at least two of the conversion units. Thus, the control unit removes the image data from the communications bus to perform a plurality of conversions. This results in freeing the communications bus for other tasks that require processing unit and memory access.

Accordingly, Applicants respectfully submit that Endo fails to teach or suggest a plurality of conversion units configured to convert the image data and a control unit configured to control the conversion units which receives image data from the data communication bus into the control unit and outputs the image data to the data communications bus after a predetermined number of conversions are completed by each of the at least two of the conversion units as is recited in Claim 25.

Grosse describes a method and apparatus for truncation of images during data compression. However, Grosse does not describe supplying, from the control unit to the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data as is recited in Claim 25.

Regarding the supplying, from the control unit to the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data,

the outstanding Office Action asserts on pages 7-8 that Grosse describes the features of the claimed invention. However, Applicants respectfully traverse this assertion.

Specifically, Grosse describes an image buffer that is coupled to buffer control via an interface. Buffer control counts the number of bytes as they are outputted from an image buffer. This counter is further coupled to buffer control and to a compression processor via an interface. However, Grosse does not recite supplying, from the control unit to the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data.

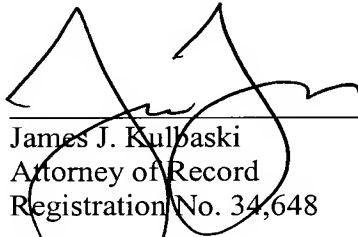
In contrast, Claim 25 recites supplying, from the control unit to the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data. This clock signal is supplied to the selected conversion units from among the plurality of conversion units. Accordingly, Applicants respectfully submit that Grosse fails to teach or suggest the supplying, from the control unit to the selected at least two of the conversion units, a clock signal that provides synchronization for transfer of the image data as in Claim 25.

Thus, Applicants respectfully submit that independent Claims 1, 20, 25, and 27 and the claims depending therefrom, patentably distinguish over Savage, Gomez, and Ohara. Accordingly, Applicants respectfully request that the rejection of Claims 1, 20, 25, and 27 under 35 U.S.C. §103(a) be withdrawn.

Consequently, in light of the above discussion and in view of the present amendments, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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